

IN THE CLAIMS:

Please amend Claims 1, 4 and 5, as follows. All claims in the application are being reproduced below in accordance with current U.S. Patent and Trademark Office requirements.

1. (Currently Amended) A recording apparatus provided with a stepping motor as an actuator, comprising:

storage means for storing and holding information regarding a final exciting phase of the stepping motor upon entering a software power off state in which consumption of electrical power of said recording apparatus is restricted; and

control means for starting excitation of the stepping motor based on the information regarding the final exciting phase, read out from said storage means, ~~instead of performing~~ without performing phase alignment of the stepping motor, when said recording apparatus restarts from the software power off state.

2. (Previously Presented) A recording apparatus provided with a stepping motor as an actuator, comprising:

storage means for storing and holding information regarding a final exciting phase of the stepping motor and information regarding a termination status indicating the presence/absence of an abnormality at the time of entering a software power off state; and

control means for, when said recording apparatus restarts from the software power off state, starting excitation of the stepping motor based on the information regarding the final exciting phase, read out from said storage means, without performing

phase alignment of the stepping motor when the information regarding the termination status is normal, and performing phase alignment of the stepping motor when the information regarding the termination status is abnormal.

3. (Previously Presented) The recording apparatus according to claim 2, wherein said control means starts the phase alignment of the stepping motor based on the information regarding the final exciting phase when the information regarding the termination status is abnormal.

4. (Currently Amended) A recording apparatus provided with driving means for driving a member to be driven as a driving source for a stepping motor, comprising:

storage means for storing and holding information regarding a final exciting phase of the stepping motor upon entering a software power off state in which consumption of electrical power by said recording apparatus is restricted;

a sensor, said sensor detecting whether the driven member moves by a predetermined number of pulses when the predetermined number of pulses is applied to the stepping motor at a standby position; and

control means for applying the predetermined number of pulses based on the information regarding the final exciting phase, read out from said storage means, ~~instead of performing~~ without performing phase alignment of the stepping motor when said recording apparatus restarts from the software power off state, when said sensor detects movement by

the predetermined number of pulses, and for performing phase alignment of the stepping motor when said sensor does not detect movement by the predetermined number of pulses.

5. (Currently Amended) A recording apparatus provided with driving means for driving a member to be driven as a driving source for a stepping motor, comprising:

storage means for storing and holding information regarding a final exciting phase of the stepping motor upon entering a software power off state in which consumption of electrical power by said recording apparatus is restricted;

a sensor, said sensor detecting a rotation amount or a corresponding value of the stepping motor during the software power off state; and

control means for determining, when said recording apparatus restarts from the software power off state, an excitation phase corresponding to a position of a rotor of the stepping motor at the time of the restart, based on the rotation amount of the stepping motor detected by said sensor and the information regarding the final exciting phase read from said storage means, and starting the excitation of the stepping motor from the determined excitation phase ~~instead of performing~~ without performing phase alignment of the stepping motor.

6. (Previously Presented) The recording apparatus according to claim 1, wherein said recording apparatus is a serial type recording apparatus.

7. (Previously Presented) The recording apparatus according to claim 6, wherein the stepping motor is one of a carriage driving motor, a print medium conveying motor, a print medium feeding motor, and a motor for driving a recording head maintenance mechanism.

Claims 8-11 (Cancelled).

12. (Previously Presented) A recording apparatus provided with a stepping motor as an actuator, comprising:

drive means for changing an exciting phase of the stepping motor to step-drive the stepping motor;

storage means for storing and holding information regarding a final exciting phase of the stepping motor upon entering a software power off state in which consumption of electrical power by said recording apparatus is restricted; and

control means for starting excitation of the stepping motor based on the information regarding the final exciting phase stored in said storage means at the time of restarting from the software power off state of said apparatus.

13. (Previously Presented) The recording apparatus according to claim 12, said apparatus further comprising:

phase alignment means for aligning a mechanical phase of the stepping motor and an electrical phase when said apparatus is at a hardware power off state.

14. (Previously Presented) The recording apparatus according to claim 13, further comprising:

additional storage means for storing a termination status indicating a presence/absence of an abnormality upon entering a software power off state in which consumption of electrical power of said recording apparatus is restricted, wherein

at the time of restarting from the software power off state of said apparatus, said control means starts the excitation of the stepping motor based on the information regarding the final exciting phase stored in said storage means without performing the phase alignment by said phase alignment means when said additional storage means stores a normal termination status, and starts excitation of the stepping motor after said phase alignment means performs the phase alignment when said additional storage means stores an abnormal termination status.

15. (Previously Presented) The recording apparatus according to claim 14, wherein said control means starts the phase alignment by said phase alignment means based on the information regarding the final exciting phase stored in said storage means when said additional storage means stores an abnormal termination status.

16. (Previously Presented) A recording apparatus provided with a stepping motor as an actuator, comprising:

drive means for changing an exciting phase of the stepping motor to step-drive the stepping motor;

storage means for storing and holding information regarding a final exciting phase of the stepping motor upon entering a software power off state in which consumption of electrical power by said recording apparatus is restricted;

phase alignment means for aligning a mechanical phase of the stepping motor and an electrical phase stored in said storage means;

a driven member driven by the stepping motor;

a sensor, said sensor detecting whether said driven member moves by a predetermined number of pulses from a standby position of the member; and

control means for starting excitation of the stepping motor based on the information regarding the final exciting phase stored in said storage means to drive said driven member by the predetermined number of pulses at the time of restarting from the software power off state of said apparatus, without performing the phase alignment by said phase alignment means, when said sensor detects that said driven member is moved by the predetermined number of pulses, and performing the phase alignment by said phase alignment means when said sensor detects that said driven member is not moved by the predetermined number of pulses.

17. (Previously Presented) A recording apparatus provided with a stepping motor as an actuator, comprising:

drive means for changing an exciting phase of the stepping motor to step-drive the stepping motor;

a sensor, said sensor detecting a value corresponding to a rotating amount of the stepping motor during a software power off state in which consumption of electrical power by said recording apparatus is restricted;

storage means for storing and holding information regarding a final exciting phase of the stepping motor at the time said apparatus enters the software power off state;

changing means for changing the information regarding the final exciting phase stored in said storage means in accordance with a value detected by said sensor; and

control means for, at the time of restarting from the software power off state of said apparatus, starting excitation of the stepping motor based on the information regarding the exciting phase stored in said storage means.

18. (Previously Presented) The recording apparatus according to claim 1, wherein the phase alignment of the stepping motor is performed in a manner so that the stepping motor is driven by a predetermined number of pulses at a self-starting region of the stepping motor as a driving region and the mechanical phase and the electrical phase of the stepping motor are identical.

19. (Previously Presented) The recording apparatus according to claim 1, wherein said storage means is a non-volatile memory.

20. (Previously Presented) The recording apparatus according to claim 12, wherein said storage means is a non-volatile memory.